Application No.: 10/656,901 Docket No.: 65744/P011C1/10313161

## **AMENDMENTS TO THE CLAIMS**

- 1. (Cancelled)
- 2. (Cancelled)
- 3. (Original) An ultrasound system application specific integrated circuit (US-ASIC) having at least one beam former, a transducer controller, one or more digital signal processor(s), and a plurality of input/output channels for linking to at least one memory means, a power control system, a transducer and a user interface.
  - 4. (Cancelled)
  - 5. (Cancelled)
  - 6. (Cancelled)
  - 7. (Cancelled)
  - 8. (Cancelled)
  - 9. (Cancelled)
  - 10. (Cancelled)
  - 11. (Cancelled)
  - 12. (Cancelled)
- 13. (Previously Presented) The US-ASIC of claim 3, wherein said at least one beam former comprises:
  - a transmit beam former and a receive beam former.
- 14. (Previously Presented) The US-ASIC of claim 13, wherein said transmit beam former and said receive beam former draw from a single master clock path for precise timing.
  - 15. (Previously Presented) The US-ASIC of claim 3, further comprising: analog to digital and digital to analog converters.